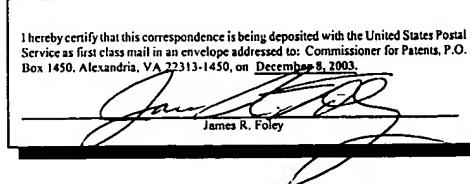




PATENT

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Serial No.: 10/718,435)
Filed: November 20, 2003)
For: A COMBINED COATING PROCESS)
COMPRISING MAGNETIC FIELD-)
ASSISTED, HIGH-POWER, PULSED)
CATHODE SPUTTERING AND AN)
UNBALANCED MAGNETRON)
Applicants: Arutun Papken Ehiasarian et al.)
Attorney Ref: 2146/41506/Case 1)



INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with Applicant's duty of candor under 37 CFR §1.56 and in compliance with 37 CFR §1.97 and §1.98, Applicant is not aware of any material prior art but, in an abundance of caution and candor, Applicant submits the present Information Disclosure Statement and Form PTO-1449.

This Information Disclosure Statement is being filed within three months of the filing date and before the receipt of a first Office Action on the merits and constitutes a bona fide attempt to comply with 37 CFR §1.97 and §1.98.

In accordance with 37 C.F.R. §1.97, the presentation of this information shall not be construed as a representation that no other material information as defined in 37 C.F.R. §1.56 exists, or as an admission that the information cited in this statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56.

Two of the cited references are not in English. DE 101 24 749 is relevant in that it discloses a PVD process for coating substrates. The article "Nouvelles tendances en procedes magnetron et arc" is relevant in that it discloses a process using the combination of a cathodic arc discharge and an unbalanced magnetron for the coating of tools and components which are subjected to severe wear.

Should the Examiner believe a fee is required, the United States Patent and
Trademark Office is hereby authorized and requested to charge the fee to the deposit account of
the undersigned firm, Account No. 20-1495.

Respectfully submitted,

Dated: December 8, 2003

By: 

Richard A. Giangiorgi, Reg. No. 24,284

James R. Foley, Reg. No. 39,979

TREXLER, BUSHNELL, GIANGIORGI,
BLACKSTONE & MARR, LTD.

105 W. Adams Street, 36th Floor

Chicago, Illinois 60603

(312) 704-1890

DEC 11 2003
U.S. PATENT AND TRADEMARK OFFICE
(Rev. 12-15-98)

Sheet 1 of 1

<p style="text-align: center;">U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</p> <p style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p style="text-align: center;">(Use several sheets if necessary)</p>										ATTY. DOCKET NO. 2146/41506/1	SERIAL NO. 10/718,435			
										APPLICANT: Arutun Papken Ehiasarian et al.				
										FILING DATE: November 20, 2003	GROUP Not yet assigned			
U.S. PATENT DOCUMENTS														
EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
		6	2	9	6	7	4	2						
		6	0	3	3	7	3	4	10/2/2001	Kouznetsov				
		5	3	0	6	4	0	7	3/7/2000	Muenz et al.				
									4/26/1994	Hauzer et al.				
FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
		DE	1	0	1	2	4	7					4	9
DE	1	0	1	2	4	7	4	9	11/28/2002	Germany			<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
EP	1	2	6	0	6	0	3		11/27/2002	Europe			<input type="checkbox"/> YES	<input type="checkbox"/> NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)														
		Munz, W.-D., "Nouvelles tendances en procedes magnetron et arc", Le Vide, No. 297, Vol. 3/4, 2000, p. 205-223.												
		Munz, W.-D., "Wear Resistant PVD Coatings for High Temperature (950°C) Applications", SVC 42 nd Annual Conference, Chicago, April 17-22, 1999, p. 350-356.												
		Schonjahn, C., Donohue, L.A., Lewis, D.B., and Munz, W.-D., "Enhanced adhesion through local epitaxy of transition-metal nitride coatings on ferritic steel promoted by metal ion etching in a combined cathodic arc/unbalanced magnetron deposition system", Journal of Vacuum Science and Technology, Vol. 18, Issue 4, 2000, p. 1718-1723.												
		Munz, W.-D., Smith, I.J., Lewis, D.B., and Creasey, S., "Droplet formation on steel substrates during cathodic steered arc metal ion etching", Vacuum, Vol. 48, Issue 5, 1997, p. 473-481.												
		Wang, H.W., Stack, M.M., Lyon, S.B., Hovsepian, P., and Munz, W.-D., "The corrosion behaviour of macroparticle defects in arc bond-sputtered CrN/NbN superlattice coatings", Surface and Coatings Technology, Vol. 126, 2000, p. 279-287.												
		Ehiasarian, A.P., New, R., Munz, W.-D., Hultman, L., Helmersson, U., and Kouznetsov, V., "Influence of high power densities on the composition of pulsed magnetron plasmas", Vacuum, Vol. 65, 2002, p. 147-154.												
EXAMINER										DATE CONSIDERED				
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>														
595381														